

DATE:

November 15, 1984

TO:

Miles A. Zamco, Manager, FOS, DAPC

FROM:

Frederick L. Smith

HOV 2 0 1934

IEPA - DAPO - SPELD

SUBJECT:

Sherwin Williams: Stack Test on Boiler House Using Para Cresol as a Supplemental Fuel: 031 600 AHO

Sherwin Williams requested a meeting to finalize test protocol for the upcoming tests on their boiler while using para cresol as a supplemental fuel. Sherwin Williams (SW) had received my letter dated October 31, 1984 approving the test protocol. This meeting, held November 8, 1984, was to settle any last minute questions. Some of the points discussed are as follows:



A pre-test test will be conducted November 26, 1984. Sampling train validation work will be accomplished at this time. A known amount of para cresol pitch will be injected into the train. SW will analyze samples sequentially to determine where spikes of cresol, biphenyls, etc. occur. We will have information on how much sample is retained by the resin and how much can be recovered.

Para cresol pitch is being stockpiled for use during the formal test, to be conducted November 29, 1984. The pitch will be stored in a tank and stirred constantly before firing to avoid stratification.

Twenty-four points per test will be sampled (maximum number) under Method 1. XAD-2 collects moisture. This moisture will be drained into the traps following each test and included into the condensate volume. We may not recover a few mls of  $\rm H_2O$ , resulting in a slightly lower moisture content. This should not cause a significant decrease in moisture determination.

An integrated sample will be collected. Orsat analysis will be conducted on site. The sample will be returned to the laboratory for CO analysis using Method 10. Orsat analysis will be checked.

Collection efficiency will be determined from work done on November 26, 1984.

Field, trip and blank samples will be gathered. Laboratory samples of filter, reagents, etc. will be retained. No analysis will be necessary unless we suspect a contamination problem.

USDA food grade teflon (in freon) will be used as a sealant for impingers instead of the usual "stop cock grease".

Sherwin Williams November 15, 1984 Page 2

Para cresol being burned during the testing will be metered. The gauge measuring volumetric flow will be calibrated prior to the testing. Density of the pitch will be determined. Volume and density will be measured at the same temperature, probably about  $80^{\circ}\text{C}$ .

Boiler parameters such as feed rate, amount burned, gas burned, etc. will be monitored. Readings will be made five or six times during each test to show that no swings occur. Samples of cresol pitch will be pulled before and during sampling for analysis. SW will check to be sure the feed line system to the burner is clean.

I have cleared a potential noise pollution violation with Cook County and the City of Chicago. SW will vent steam creating a noise problem. They will have to vent 70,000 - 90,000 pounds of 600 psi steam. These other Agencies will not issue a violation during the test period.

FLS/gkw/0481A

CC - Sy Levine/Mel Villalobos/Kerry Keller

- Bharat Mathur